Steam System Scoping Tool (SSST) Executive Summary

Overview: As a part of the Steam System Tool Suite, the Steam System Scoping Tool (SSST) is non-quantitative and its purpose is to provide an up-front assessment of practices associated with the entire steam system for the purpose of identifying potential investigation areas. The sections in the tool are scored based on user responses to questions, and these points are added together for an overall score. The score is compared to the total possible points possible if all the "Best Practices" for a steam system are followed.

The software asks twenty-six questions about different areas of the steam system, including: steam system profile, steam system operating practices, boiler plant operating practices, and distribution and recovery operation practices. The tool is not a specific calculation tool; but rather an aid designed to identify potential areas to investigate. The Steam System Scoping Tool should be the first tool used when assessing a steam system.

In 2001, six DOE Industrial Assessment Centers used SSST, along with the other Steam Suite Tools, to assess steam systems at 18 small- and medium-sized facilities. Those assessments successfully identified 89 steam system improvements with an average payback of 7 months and an average fuel bill savings of 12.5%. Collectively, the improvements yielded a total annual savings of $2.8 million.

Data Collection Requirements: The Steam System Scoping Tool requires the following input information (answering the twenty six questions should take less than an hour. The investigation process initiated by the Scoping Tool can require significant effort.) :

- General site operating characteristics, including measurements and metrics
- Steam generation system operating conditions including fuel types, blow down management , boiler efficiency monitoring and control methods, steam production metrics and other general boiler operations management
- Steam distribution system conditions including piping insulation condition, number of steam traps and their condition, condensate collection characteristics
- Maintenance information and energy monitoring practices

Qualifications: A detailed understanding of steam generation, steam distribution, and end-use at a particular facility is required to operate this tool. Technical training or significant operating experience is recommended.

Usage of the tool: This tool can be used periodically to evaluate the current state of a steam system. Continuous measurements are not required to operate this tool.

Ease of Use/Software Compatibility: The tool is available in Microsoft Excel or Visual Basic. Only basic knowledge of computers is required to operate the tool.

Product roll-out roadmap: Version 2, released in 2002 replaces earlier versions of SSST. There are currently no plans to update the software.